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## IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Attorney Docket No.: **PENN-0749**Inventors: **Muzykantov et al.**Serial No.: **09/762,023**Filing Date: **June 28, 2001**Examiner: **M. DiBrino**Group Art Unit: **1644**Title: **TARGETING AND PROLONGING ASSOCIATION OF DRUGS TO THE LUMINAL SURFACE OF THE PULMONARY VASCULAR ENDOTHELIAL CELLS****Certificate of Facsimile Transmission**

I hereby certify that this paper is being facsimile transmitted to the Patent and Trademark Office on the date shown below.

On November 7, 2002Jane Massey Licata  
Jane Massey Licata Registration No. 32,257Assistant Commissioner for Patents  
Washington, DC 20231

Dear Sir:

**REPLY TO RESTRICTION REQUIREMENT**

This reply is to the Office Action mailed October 8, 2002 setting a one (1) month statutory period for response. Please enter the following remarks into the record.

**REMARKS**

Claims 1-8 are pending in the instant application. The Examiner has made a restriction requirement under 35 U.S.C. §121 and 35 U.S.C. §372 as follows:

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Group I, claims 1-4, drawn to a method for targeting and prolonging association of a selected drug to the luminal surface of pulmonary vascular endothelium (pev) comprising administering a drug and a non-internalizable antibody against an antigen on the luminal surface of the pev;

Group II, claims 5-8 drawn to a method of dissolution of fibrin clots or prevention of intravascular coagulation in the pulmonary vasculature comprising administering a fibrinolytic or anticoagulant in combination with a non-internalizable antibody against an antigen on the luminal surface of the pev.

The Examiner suggests that Groups I and II are not so linked as to form a single general inventive concept under PCT Rule 13.1, as under PCT Rule 13.2 they are suggested to lack the same or corresponding special technical features. It is suggested that claim 1 does not provide a technical feature that is distinguished over the prior art, as evidenced by Bowes et al. (1995), in view of Imaizumi and further in view of Mulligan et al. and Panes et al. Applicants respectfully traverse this restriction requirement.

PCT Rule 13.2 considers the special technical features to be shown for chemical alternatives when (A) all alternatives have a common property or activity and, (B) (1) a common structure is

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present, or (B) (2) all alternatives belong to an art recognized class of compounds in the art to which the invention pertains.

Bowes et al. (1995) teach use of a anti-ICAM-1 antibody in conjunction with tPA in an animal model of cerebral embolism stroke for study of the thrombolytic effects of tPA both alone and in the presence of the antibody. The results showed that the combination of the two did not work better than each compound alone in reducing neurological damage. Nowhere does this paper teach or suggest targeting the luminal surface of pulmonary vascular endothelium with a drug in combination with a non-internalizable antibody. Further, the secondary references fail to overcome the deficiencies in the teachings of Bowes et al., as none of the secondary references teach or suggest targeting the luminal surface of pulmonary vascular endothelium with a drug in combination with a non-internalizable antibody. Therefore, this combination of prior art fails to teach the limitations of the claims as filed. Accordingly, it is respectfully submitted that the instant claims do provide a special technical feature, and possess both inventive step and unity of invention. Reconsideration and withdrawal of this Restriction Requirement is therefore respectfully requested. However, in an earnest effort

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to facilitate prosecution of this application, Applicants hereby elect to prosecute Group II, claims 5-8, with traverse.

Respectfully submitted,

*Jane Massey Licata*

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Registration No. 32,257

Date: **November 7, 2002**

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November 7, 2002

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<b>AMENDMENT TRANSMITTAL LETTER (Small Entity)</b>			Docket No. <b>PENN-0749</b>																																					
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<b><u>TO THE ASSISTANT COMMISSIONER FOR PATENTS:</u></b>																																								
<p>Transmitted herewith is an amendment in the above-identified application.</p> <p><input checked="" type="checkbox"/> Small Entity status of this application has been established under 37 CFR 1.27 by a verified statement previously submitted.</p> <p><input type="checkbox"/> A verified statement to establish Small Entity status under 37 FR 1.27 is enclosed.</p>																																								
<p>The fee has been calculated and is transmitted as shown below.</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th colspan="6" style="text-align: center; padding: 2px;">CLAIMS AS AMENDED</th> </tr> <tr> <th style="width: 15%;"></th> <th style="width: 20%; text-align: center; padding: 2px;">CLAIMS REMAINING AFTER AMENDMENT</th> <th style="width: 20%; text-align: center; padding: 2px;">HIGHEST # PREV. PAID FOR</th> <th style="width: 20%; text-align: center; padding: 2px;">NUMBER EXTRA CLAIMS PRESENT</th> <th style="width: 10%; text-align: center; padding: 2px;">RATE</th> <th style="width: 15%; text-align: center; padding: 2px;">ADDITIONAL FEE</th> </tr> </thead> <tbody> <tr> <td style="padding: 2px;">TOTAL CLAIMS</td> <td style="text-align: center; padding: 2px;">8 -</td> <td style="text-align: center; padding: 2px;">20 =</td> <td style="text-align: center; padding: 2px;">0</td> <td style="text-align: center; padding: 2px;">x \$9.00</td> <td style="text-align: center; padding: 2px;">\$0.00</td> </tr> <tr> <td style="padding: 2px;">INDEP. CLAIMS</td> <td style="text-align: center; padding: 2px;">2 -</td> <td style="text-align: center; padding: 2px;">3 =</td> <td style="text-align: center; padding: 2px;">0</td> <td style="text-align: center; padding: 2px;">x \$42.00</td> <td style="text-align: center; padding: 2px;">\$0.00</td> </tr> <tr> <td colspan="5" style="text-align: center; padding: 2px;">Multiple Dependent Claims (check if applicable) <input type="checkbox"/></td> <td style="text-align: center; padding: 2px;">\$0.00</td> </tr> <tr> <td colspan="5" style="text-align: center; padding: 2px;">TOTAL ADDITIONAL FEE FOR THIS AMENDMENT</td> <td style="text-align: center; padding: 2px;">\$0.00</td> </tr> </tbody> </table>					CLAIMS AS AMENDED							CLAIMS REMAINING AFTER AMENDMENT	HIGHEST # PREV. PAID FOR	NUMBER EXTRA CLAIMS PRESENT	RATE	ADDITIONAL FEE	TOTAL CLAIMS	8 -	20 =	0	x \$9.00	\$0.00	INDEP. CLAIMS	2 -	3 =	0	x \$42.00	\$0.00	Multiple Dependent Claims (check if applicable) <input type="checkbox"/>					\$0.00	TOTAL ADDITIONAL FEE FOR THIS AMENDMENT					\$0.00
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<p><input checked="" type="checkbox"/> No additional fee is required for amendment.</p> <p><input type="checkbox"/> Please charge Deposit Account No. <b>50-1619</b> in the amount of <b>\$0.00</b>. A duplicate copy of this sheet is enclosed.</p> <p><input type="checkbox"/> A check in the amount of <b>\$0.00</b> to cover the filing fee is enclosed.</p> <p><input checked="" type="checkbox"/> The Commissioner is hereby authorized to charge payment of the following fees associated with this communication or credit any overpayment to Deposit Account No. <b>50-1619</b>. A duplicate copy of this sheet is enclosed.</p> <p><input checked="" type="checkbox"/> Any additional filing fees required under 37 C.F.R. 1.16.</p> <p><input checked="" type="checkbox"/> Any patent application processing fees under 37 CFR 1.17.</p>																																								
<u><i>Jane Massey Licata</i></u> <span style="font-size: small;">Signature</span>																																								
<span style="font-size: small;">Jane Massey Licata Reg. No. 32,257 Licata &amp; Tyrrell P.C. 66 E. Main Street Marlton, NJ 08053 Tel: 856-810-1515 Fax: 856-810-1454</span>																																								
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**CERTIFICATE OF TRANSMISSION BY FACSIMILE (37 CFR 1.8)**

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1644Invention: **TARGETING AND PROLONGING ASSOCIATE OF DRUGS TO THE LUMINAL SURFACE  
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(Date)Jane Massey Licata

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